

## HUNGARIAN LAND USE IN THE LAST DECADE

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### Introduction

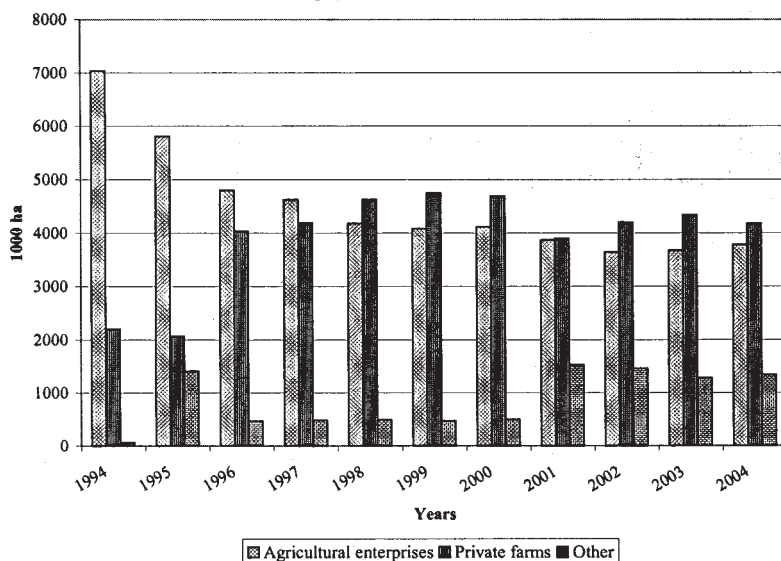
One of the most important questions of efficient agricultural production is the required land property size, suitable for farming. Big differences have evolved in the course of historical development in land property size all over the world.

One of the most important questions of efficient agricultural production is the required land property size, suitable for farming. Big differences have evolved in the course of historical development in land property size all over the world. Farms with big agricultural land have existed in the agricultural production before changes happened in the Hungarian social system. After "compensation", a great number of individual owners have acquired small agricultural land estates.

### Agricultural by used land by farming forms

In the last decades the function of the individual farmer has become determining step by step as opposed to the economic organisations last decade. The land use by private farmers increased until 1998, decreased in 1999 and 2000. In 2001, the land use by private farmers are 4,155 thousand hectares. The land used by economic organisations decreased continuously until 2001, but from that year stagnated. Diagram 2 Land area by legal form between

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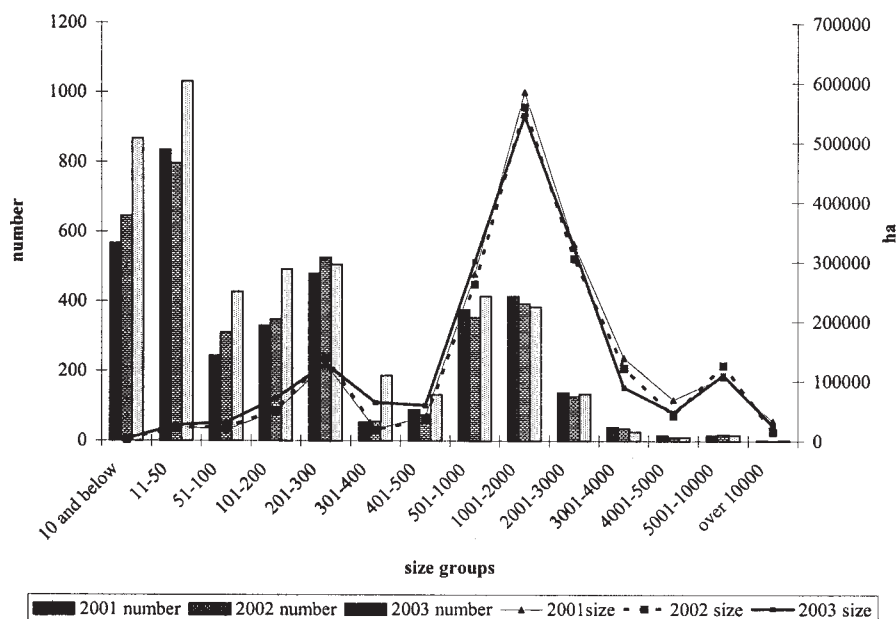
The economic organisations used 67.6% of arable land in 1994, but only that at 46% in 2001. Partnerships shared 35% of used cultivated land and 26,8% of arable land in 2001.

The arable land cultivated by private farmers increased more than 2 times since 1994. The private farmers used 45% of the arable land, 4,155,000 ha in 2004. Considering the distribution by size of the farms, large-scale farms used 45% of agricultural land, medium sized farms used 10% of agricultural land and ratio of small farms was 27%. (The ratio of the agricultural area outside observation is 18%. We have not got data about the size of these areas.)

96% of the land use by economic organisations belonged to the large farm group in 1998. Only 3% of the land use by economic organisation was in the medium size farms group. Under 1% of the land use by economic organisation was in the small size farm group.

Diagram 1 shows the number of organizations with arable land and size of arable land. If we examine diagram 1 changing is noticeable between 2001 and 2003. The number of organizations has increased in the small size farm groups.

Diagram 1 Number of organizations with arable land and size of arable land



There are seven regions in Hungary. Table 1 shows the land area and productive land by regions and land use categories. South Plan is the biggest region (on the second place is North Plan) and here is biggest share of arable land, too. The smallest is Middle Hungary.

Table 1 Land area and productive land by regions in Hungary

Regions	Land, 1000 ha	Productive land, 1000	Arable land	Garden	Orchard	Vineyard	Grassland	Forest	Reed	Fish-pond
			share, %							
Middle Hngary	733,7	552,3	54,6	2,2	2,3	1,2	10,6	27,1	0,8	1,3
Middle Transdanubia	1107,4	877,5	57,6	1,4	0,5	1,3	12,9	25,0	0,9	0,3
West Transdanubia	1115,6	938,6	53,7	1,1	0,7	0,8	12,0	30,4	1,2	0,0
South Transdanubia	1356,2	1170,1	59,8	1,1	0,5	1,1	9,7	26,7	0,6	0,5
North Hungary	1330,4	1135,0	44,2	1,6	1,1	1,8	17,6	33,3	0,2	0,1
North Plan	1816,0	1493,0	65,5	1,0	2,6	0,3	15,9	13,4	0,9	0,5
South Plan	1844,2	1565,9	65,5	1,2	1,0	1,9	14,5	14,5	0,9	0,5
Total	9303,4	7732,4	58,4	1,3	1,3	1,2	13,7	22,9	0,8	0,4

Source: A magyar régiók zsebkönyve 2003. KSH, 2004. (p.32.)

### Methods

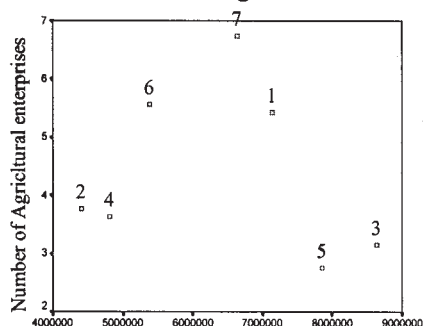
I used TSTAR 2000 (Location Statistical Database System) database which was made by Hungarian Statistical Office. It contain a lot of information, but it have used just some important number of agricultural enterprises, number of private farms, land use by agricultural enterprises and land use by private farms by regions.

The hierarchical cluster database has applied by SPSS program. The cluster method is the centroid clustering and the measure interval is squared Euclidean distance.

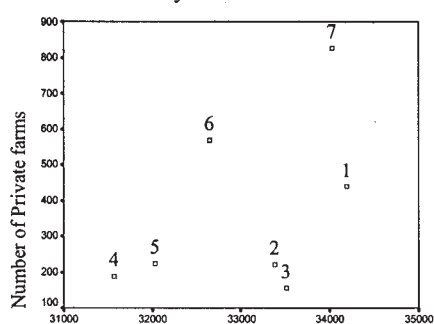
### Results

You can see on the diagram 3 the results in the case of agricultural enterprises and private farms.

Diagram 3 Results of hierarchical cluster analysis



Land use by Agricultural enterprises



Land use by Private farms

### Legend:

	Regions in Hungary
1	Middle Hungary
2	Middle Transdanubia
3	West Transdanubia
4	South Transdanubia
5	North Hungary
6	North Plain
7	South Plain

At the agricultural enterprises, Middle Transdanubia and South Transdanubia are in one cluster and West Transdanubia and North Hungary in an other cluster. If we increase the distance Middle Hungary and South Plan create one cluster.

At the private farms, Middle Transdanubia and West Transdanubia are in one cluster and South Transdanubia and North Hungary in an other cluster. If we increase the distance Middle Hungary and South Plan create one cluster.

The North Plan is not in cluster agricultural enterprises neither private farms nor at the first and second cluster steps.

### Conclusions

To sum up it can be said that a very difficult system of relationships will be created as to the owner structure, legal forms of the enterprises and the interest system inside the cooperatives. The co-operative, the enterprise, the individual farmer and primary farmer (őstermelő) are present in the agriculture at the same time as for legal forms.

There are big differences between regions in number of agricultural organisations, private farms and their land use. Between the agricultural enterprises and private farms are big differences in Middle Transdanubia and North Hungary consider of examined points.

### References

A magyar régiók zsebkönyve 2003. KSH, 2004. (p.32.)

A mezőgazdaság strukturális változásai a kilencvenes években. KSH, 2003. 31.p.

István Szűcs – Zsuzsanna Szeles: Land property and property relation in the EU-approaching process in Hungary. Studies in Agricultural Economics 2004 No 100. HU ISSN 1418-2106 (p.39-54)

Statistical Yearbook of agriculture 2001, 2002, 2003. KSH, 2002, 2003, 2004 (p.56.)

Statistical Yearbook 1999. KSH Budapest, 2000. 35.o.; Magyar Statisztikai Zsebkönyv 2000. KSH, 2001. (p.230.)